## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE INDIANA HARBOR BELT RAILROAD NEAR CHICAGO RIDGE, ILL., ON OCTOBER 14, 1933.

January 11, 1934.

To the Commission:

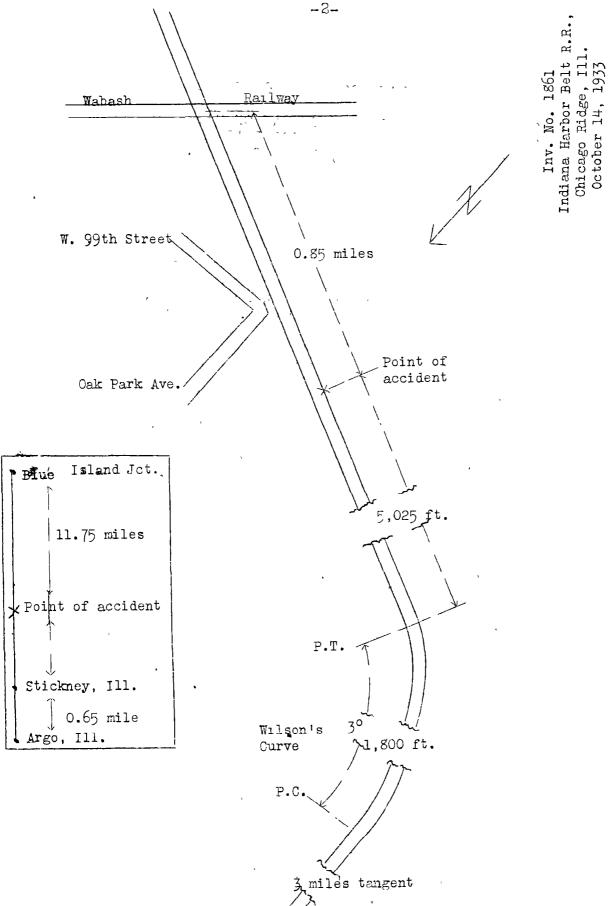
On October 14, 1933, there was a rear-end collision between two Baltimore & Ohio Railroad freight trains moving over the Indiana Harbor Belt Railroad near Chicago Ridge, Ill., which resulted in the death of one employee. This accident was investigated in conjunction with the Illinois Commerce Commission.

Location and method of operation

The track involved extends between Argo and Blue Island Junction, Ill., a distance of 12.4 miles; this track is owned by the Baltimore & Ohio Chicago Terminal Railroad, hereinafter referred to as the B&OCTRR, and is leased to the Indiana Harbor Belt Railroad, hereinafter referred to as the IHBRR, which road in turn leases trackage rights to the B&OCTRR. In the immediate vicinity of the point of accident this is a double-track line over which trains are operated by the IHBRR book of rules and special instructions contained in the time table; there are no scheduled trains over this piece of track, all trains operating The accident occurred outside of yard limits on the east-bound main track near W. 99th St. and Oak Park Ave., or at a point about 0.85 mile west of the Wabash Railroad crossing. Approaching this point from the west, the track is tangent for more than 3 miles, and then there is a 3° curve to the left about 1,800 feet in length, known as Wilson's curve, followed by 5,025 feet of tangent to the point of accident, this tangent extending for a considerable distance beyond that point. The grade is descending for east-bound trains, being 0.21 percent at the point of accident.

The trains involved moved from Glenn Yard over the Alton Railroad and entered upon the tracks of the IHBRR at Argo on a hand signal from the switchtender at that point; neither train had train orders and there were no automatic or manual block signals involved where the accident occurred, although there is a manual block signal at Argo which governs east-bound train movements to Stickney, 0.65 mile beyond Argo. The speed of freight trains is limited to 40 miles per hour.

The weather was clear at the time of the accident, which occurred about 10:59 p.m.



## Description

Fast-bound B&O freight train no. 94-B consisted of 15 loaded and 1 empty car and a caboose, hauled by engine 4538, and was in charge of Conductor Kast and Engine an Soll. This train left Argo at 10:47 p.m., according to the train sheet, passed Stickney at 10:50 p.m., and was flagged by the flagman of an IHBRR freight train which had stopped for the Wabash crossing east of the point of accident. Train no. 94-B was brought to a stop about 100 feet behind the caboose and after standing at this point about 2 minutes its rear end was struck by train second no. 94-A.

East-bound B&O freight train second no. 94-A consisted of 19 loaded cars and a caboose, hauled by engines 4518 and 4598, in charge of Conductor Bagent and Enginemen Detrich and Dreibelbis. This train left Argo at 10:51 p.m., according to the train sheet, having received a yellow indication on the manual block signal which required it to proceed with caution from Argo to Stickney, passed Stickney at 10:53 p.m., and collided with train no. 94-B while traveling at a speed estimated to have been 8 or 10 miles per hour.

The caboose of train no. 94-B was demolished and the tank car shead of it was thrown on top of the succeeding box car, which was derailed across both main tracks. Engine 4518 was derailed to the south and stopped leaning to the right with its tender partly derailed; engine 4598 was not derailed or damaged. The employee killed was the head brakeman of train no. second 94-A, who was riding on engine 4518.

## Summary of evidence

Engineman Sell, of train no. 94-B, stated that when approaching Wilson's curve the speed was about 35 miles per hour and he reduced it to about 20 or 25 miles per hour. After rounding the curve he saw a fusee; he reduced the speed further and then stopped his train about 100 feet behind the caboose of the freight train ahead and whistled out a flag, the accident occurring about 1 or 2 minutes afterwards.

Argo he was busy working on his bills inside the caboose and the flagman was on the rear platform. The conductor said that his train slowed down for about 40 or 50 car lengths and then stopped. In the meantime the flagman had come inside the caboose and told him there was a train following them, after which he lighted a fusee and got off, while the conductor also got off and then looked shead to see what was holding up his train, the accident occurring shortly afterwards. Conductor Kast said that train second no. 94-A was about 25 car lengths away when his flagman got off the caboose and that the flagman reached a point about 4 car lengths from the caboose before the following train passed him; he did not hear the following engineman answer the flag but was told by a patrolman on a passing west-bound train that he had

done so. The markers on his caboose were burning properly and displayed red to the rear. Conductor Kast also said that when one train follows another closely it is customary to drop off a fusee, provided the speed of the first train is reduced; the following train then stops at the burning fusee and after removing it from the track proceeds under caution; in this particular case he did not know whether a fusec was thrown off before his train stopped.

Flagman Fawkes, of train no. 94-B, stated that when a westbound train was passing he came out on the caboose platform and looked that train over; before it got by he saw the headlight of the train behind his own, coming around the curve; he stopped inside the caboose, obtained a fusee and told the conductor that the following train was coming and that there was also another west-bound train coming. As he returned to the caboose platform his own train began to reduce speed, and about three or four car lengths before it stopped he lighted the fusec, got off, and started running back to flag, saying that the following train was then about ½ mile away, but when ne reached a point about 6 or 8 car lengths from his caboose that train passed him at a speed of about 10 or 12 miles per hour and then the collision occurred, at which time he estimated the speed to have been about 8 or 10 miles per hour. Flagman Fawkes did not think that his own train had been slowing down for a long distance, but rather for only three or four car lengths, and he estimated that it had been standing less than  $1\frac{1}{2}$  or 2 minutes when the accident occurred. He further stated that he was on the gound when the second westbound train passed on the adjacent track and that he saw the headlight of that train burning brightly instead of being dimmed, and after the accident Engineman Detrich complained that the reflection from that headlight had blinded him.

Engineman Detrich, of train second no. 94-A, knew train no. 94-B was ahead of him and when rounding Wilson's curve at a speed of about 30 miles per hour he made a 6 or 7-pound brake-pipe reduction and then lapped the brake valve. At this time the first west-bound train entered upon the curve and passed him, with its headlight dimmed, but there was a second west-bound train approaching and the headlight on that engine was burning brightly; he shut off steam and permitted his own train to proceed down grade, with the drifting throttle open, moving at a speed of 25 or 30 miles per hour, and made an attempt to signal the engineman of the other train to dim the headlight by flashing his own headlight at two different times, but to no avail. Engineman Detrich said he was keeping a close lookout and that as soon as the other engine passed him he was able to see the markers on the caboose ahead, about 20 car lengths distant, and he immediately applied the brakes in emergency, applied the independent brake, opened the sanders and closed the throttle. At that time he saw the flagman of the train ahead standing back of the caboose and swinging red and white larterns, and after his engine covered an additional distance of about eight car lengths he saw a fusee lighted, and when his engine had almost reached the caboose the flagman started toward him with the fusee.

Engineman Detrich said that the air brakes were tested at Glenn Yard and worked properly en route, but that as a result of the service application made on the curve he did not get the desired effect when he made the emergency application just prior to the collision. Engineman Detrich was of the opinion that had it not been for the brightly burning headlight of the second west-bound train he would have seen the caboose ahead in time to stop and would not have needed a flag, but that on the other hand had he been properly flagged the accident could have been averted regardless of the headlight which interfered with his view.

Fireman Runion, of engine 4518, was looking ahead between the east end of Wilson's curve and the point of accident but did not see the markers on the caboose ahead until his engine passed the bright headlight on the engine of the second west-bound train on the adjacent track. His engineman applied the brakes in emergency when about 20 or 25 car lengths from the caboose, at which time the speed was about 20 miles per hour, but the brakes did not seem to respond properly in emergency and he estimated the speed to have been about 10 or 12 miles per hour at the time of the accident. Fireman Runion saw the flagman back of the caboose swinging his lanterns,but did not see any fusee before starting to get off when about 8 or 10 car lengths from the caboose.

Engineman Dreibelbis, of engine 4598, said the brakes were applied in emergency just as they passed the second west-bound train. He thought that the flagman of the train ahead did not light a fusee until the lead engine was within 10 car lengths of the caboose and said that when the collision occurred the flagman was opposite the cab of engine 4598. After the accident he handled the train back to Glenn yard and during this trip the air brakes worked properly.

Road Foreman of Engines Davidson, of the IHBRR, interviewed Engineman Gallois, of extra 405, this being the second west-bound train previously referred to as having the headlight of the engine burning brightly, instead of being dimmed as required, and in a letter addressed to Superintendent Podesta, of the IHBRR, the road foreman of engines quoted Engineman Gallois as saying that he dimmed the headlight on his engine as required when meeting the second B&O train involved in the accident.

## Conclusions

This accident was caused by the failure of Conductor Kast and Flagman Fawkes, of train no. 94-B, to provide proper flag protection.

Rule 99, of the operating rules of the IHBRR, provides in part that when a train stops or is delayed under circumstances in which it may be overtaken by another train, the flagman must go back immediately with stop signals a sufficient distance to insure full protection, and Conductor Kast said it was customary,

when trains were following each other closely, for the flagman to throw off a fusee when his train began to reduce speed. Flagman Fawkes saw train second no. 94-A coming and went inside the caboose for a fusee, but he did not light the fusee or get off his train until it had nearly stopped, with the result that he was back only a few car lengths when the accident occurred. He should have thrown off a fusee as soon as his train began to reduce speed, which, according to Conductor Kast, was 40 or 50 car lengths from where the train stopped. Conductor Kast was where he could have supervised the flagman's actions and should have seen to it that adequate protection was afforded.

Engineman Detrich knew train no. 94-B was ahead of him but said that after rounding the curve he was blinded by the bright headlight on the engine of a train approaching from the opposite direction and that he was unable to see the markers on the caboose ahead until after passing that engine; he immediately applied the brakes in emergency, but said that they did not seem to respond properly owing to a previous service application. Under the operating conditions on this railroad, with dense traffic and no adequate signal protection, it is incumbent on an engineman to reduce speed the moment his view is obscured, whether by the headlight of an opposing train, or by fog, smoke, or other causes. In this particular case, had Engineman Detrich taken such action it is probable he would have been able to avert the accident in spite of the inadequate flag protection afforded by the crew of the preceding train. The density of traffic on this line warrants careful consideration by the carrier of the need for an adequate block signal system or other protective devices.

Members of the crews of both the lead engine and the second engine of train second no. 94-A, as well as the flagman of train no. 94-B, said the headlight of the engine of a train that was approaching from the opposite direction on the adjacent main track was burning brightly, but the engineman of that particular train denied the contention, claiming that he had the neadlight dimmed.

Respectfully submitted,

W. P. BORLAND

Director.